

STACKED CHIP ELECTRONIC PACKAGE HAVING LAMINATE CARRIER AND METHOD OF MAKING SAME

ABSTRACT

A multi-chip electronic package which utilizes an organic, laminate chip carrier and a pair of semiconductor chips positioned on an upper surface of the carrier in a stacked orientation. The organic, laminate chip carrier is comprised of a plurality of conductive planes and dielectric layers and couples one or both of the chips to underlying conductors on the bottom surface thereof. The carrier may include a high-speed portion to assure high-frequency connection between the semiconductor chips and may also include an internal capacitor and/or thermally conductive member for enhanced operational capabilities. The first chip, e.g., an ASIC chip, is solder bonded to the carrier while the second chip, e.g., a memory chip, is secured to the first chip's upper surface and coupled to the carrier using a plurality of wirebond connections.